

IN THE CLAIMS

Please amend claim 1 as follows and insert new claims 16 through 22 as indicated below.

1. (Currently Amended) A method of transporting a Time Division Multiplexing (TDM) data frame across an Ethernet switch, comprising:

~~packetizing data from an inbound Time Division Multiplexing (TDM) stream as an Ethernet packet having a header which includes TDM block identification information.~~

receiving a TDM data frame from an inbound TDM data stream at the Ethernet switch, wherein the TDM data frame comprises a payload field and a destination field; ?

writing contents included within the payload field of the TDM data frame to a first field in an Ethernet frame;

writing contents included within the destination field of the TDM data frame to a second field in the Ethernet frame;

transporting the Ethernet frame through the Ethernet switch to the outbound TDM data stream according to the destination field's contents;

extracting information included within the first field of the Ethernet frame and the second field of the Ethernet frame upon the transported Ethernet frame's arrival at the outbound TDM data stream, wherein the extracted information comprises an extracted TDM data frame; and

sending the extracted TDM data frame from the Ethernet switch via the outbound TDM data stream.

2. (Previously Amended) The method of Claim 1 wherein packetizing includes: ? AB

writing data from the inbound TDM stream into a payload field of an Ethernet packet;

and writing the TDM block identification information into the header of the Ethernet packet. ? AB

3. (Previously Amended) The method of Claim 1 wherein packetizing includes:
writing data from the inbound TDM stream to a first buffer; and
writing data from the inbound TDM stream to a second buffer while the data stored in the first buffer is written into the Ethernet packet.

4. (Previously Amended) A method comprising:
accepting a first, inbound Time Division Multiplexing (TDM) stream into a switch having an Ethernet backplane, the first TDM stream including data; writing the data into an Ethernet packet;
writing TDM block identification information into the Ethernet packet; sending the Ethernet packet over the Ethernet backplane; and
writing the data from the Ethernet packet into a second, outbound TDM stream.

5. (Cancelled)

6. (Previously Amended) The method of Claim 4 further comprising: writing data from the first TDM stream to a first buffer; and
writing data from the first TDM stream to a second buffer while the data stored in the first buffer is written into the Ethernet packet.

7. (Previously Amended) The method of Claim 4 further comprising: writing the data from the Ethernet packet to a first buffer; and
writing the data from the Ethernet packet to a second buffer while the data stored in the first buffer is written into the second TDM stream.

8. (Cancelled)

9. (Previously Amended) The method of Claim 4 wherein the data is written into a first field in the Ethernet packet and the TDM block identification information is written into a second field in the Ethernet packet.

10. (Previously Amended) A switch with an Ethernet backplane, comprising: a bus; and at least one line card connected to the bus, each line card including:
circuitry to write data from an incoming Time Division Multiplexing (TDM) stream into Ethernet packets,
circuitry to write TDM block identification information into the Ethernet packets;
circuitry to send the Ethernet packets over the backplane; and
circuitry to write the data from the Ethernet packets into an outgoing TDM stream.

11. (Previously Amended) The switch of Claim 10 wherein each line card further includes: a first buffer and a second buffer to double buffer the incoming and outgoing data.

12. (Cancelled)

13. (Previously Amended) The switch of Claim 10 wherein each line card further includes:
circuitry to write the data into a first field in the Ethernet packet, and
circuitry to write the TDM block identification information into a second field in the Ethernet packet.

14. (Previously Added) The method of Claim 9, wherein the second field is a destination field and the TDM block identification information is written into the lower bits of the destination field.

15. (Previously Added) The switch of Claim 13, wherein the second field is a destination field and the TDM block identification information is written into the lower bits of the destination field.

16. (New) The method of claim 1 wherein the TDM data frame's destination field comprises information which indicates an appropriate time to insert the data into an outbound TDM data stream.

17. (New) The method of claim 16 wherein the information which indicates an appropriate time to insert the data into an outbound TDM data stream comprises the destination of the received TDM data frame.

18. (New) The method of claim 17 wherein the information which indicates an appropriate time to insert the data into an outbound TDM data stream comprises information identifying which block of the inbound TDM data stream the received TDM data frame arrived in, wherein the identity of the block is utilized in order to reassemble the received TDM data frame as it is extracted from the Ethernet frame.

19. (New) The method of claim 1 wherein the TDM data stream is received at a line card included within the Ethernet switch.

20. (New) The method of claim 19 wherein circuitry included within the line card is utilized to write the received TDM data frame to an Ethernet data frame.

21. (New) The method of claim 20 wherein the circuitry is further utilized to send the Ethernet data frame to a destination of the TDM data frame, wherein the destination exists within the Ethernet switch.

22. (New) The method of claim 21 wherein the destination comprises another line card within the switch.

23. (New) The method of claim 21 wherein the destination comprises the line card at which the data stream is received.